



Dnyansagar Coaching Classes, A'nagar

Std. - XII

Ist Preliminary

Time - 2 hrs

Sub- Biology-I

Max Marks - 40

Q.1 Select & write the most appropriate answer from the given alternative. **8**

1. Inexhaustible resource among the following is
 - a) minerals
 - b) Solar energy
 - c) Plants
 - d) Fossil fuels
2. Aseptic culture means _____.
 - (a) Absence of life
 - (b) Pressure of bacteria
 - (c) Absence of other organisms like microbes.
 - (d) Parthenogenic development
3. The nitrogen fixing symbiotic organism present in Azolla is _____.
 - (a) *Nostoc*
 - (b) *Anabaena*
 - (c) *Aulosira*
 - (d) *Azospirillum*
4. Passive absorption occurs due to _____.
 - (a) Tension in root
 - (b) Tension in xylem sap
 - (c) ATP
 - (d) None of the above.
5. Stomata of CAM plants _____.
 - (a) Are always open
 - (b) Open during day & close at night
 - (c) Open during night & close during day
 - (d) Never open.
6. Cleistogamous flower are _____.
 - (a) Wind pollinated
 - (b) Insect pollinated
 - (c) Bird pollination
 - (d) Self pollinated
7. In which light induced process, Phytochrome is not the photoreceptor.
 - (a) Photoperiodism
 - (b) Photoreceptor
 - (c) Straightening of subterminal hook
 - (d) Bud dormancy.
8. For cryopreservation plant materials are frozen at _____.
 - (a) -40°C
 - (b) -80°C
 - (c) -150°C
 - (d) -196°C

Q.2 A] Define growth give its characteristics. **2**

OR

A] Describe any two methods of sterilization in plant tissue culture. **2**

B] Describe the structure of stomata with the help of neat diagram. **2**

OR

- B]** Define :- Microsporogenesis & Megasporogenesis 2
- C]** Give the Medicinal uses of - *occimum sanctum* 2
- D]** Sketch & lable - Tip of young root showing various regions 2
- Q.3** **A]** Differentiate between male gametophyte & female gametopyte. 2
- B]** Sketch & lable the ultrastructure of mitochondria 2

OR

- B]** Give the types of water resources. Explain any one. 2
- C]** Sketch & lable the structure of tRNA 2
- D]** Differentiate between mesophyll chloroplast & Bundle sheath chloroplast.2

OR

- D]** Define natural resources & give its classification. 2
- Q.4** **Attempt any two of the following.**
- A]** Explain the physiological role of auxins & gibberellins. 4
- B]** Enlist artificial methods of vegetative reproduction & describe any two of them 4
- C]** Describe the cohesion theory of translocation 4
- Q.5** **A]** Define genetic engineering. Give the technique of genetic engineering in short 4
- B]** Define photosynthesis. Add a note on photosynthetic pigments. 4

OR

- Describe the structure of Angiospermic ovule & add a note on embryo development. 8
